

edge of this fern, having studied it for many years, writes that "it is quite common in rich woods near sea-level, not extending very high in the mountains."

The above evidence, which is furnished by well known fern experts, proves conclusively that *Dryopteris dilatata* does *not* require a cold climate. On the contrary, it proves that in the British Isles, in Denmark and in the vast North German Plain, as well as in British Columbia and the State of Washington, this fern is found plentifully at sea-level, as well as in the mountains. These places are regions of relatively warm winters and cool summers. Like our *D. intermedia*, it flourishes in warm as well as cool temperatures.

The writer could find no evidence that *D. dilatata* is found above timber-line.

NEWBURYPORT, MASS.

Recent Fern Literature

It is not often that the JOURNAL uses reprinted matter; but the article which follows, by a recent member of the Society, gives so excellent a history of the beginnings of an enthusiasm for ferns, so admirably put (as well as an account of a new and interesting fern book by another member), that we would break a rule or two, if necessary, to place it before our readers. For the privilege of doing so, we are indebted to the kindness of the author and the courtesy of the *Providence Journal*, in whose columns it originally appeared, June 9, 1928.

CONCERNING FERNS

FIELD BOOK OF COMMON FERNS. By Herbert Durand. New York: G. P. Putnam's Sons. 16mo. Illst. \$2.50.

It is remarkable how many different ways there are of getting your hands dirty in this complex world. Babies

are born with the faculty; the growing child (that anarchist) devotes his tender years to elaborating his primitive knowledge of the art. Yet the sober adult, safely graduated from all these early foibles, is steadily surprised to find himself ever and again grubbing in the earth for something or other which, only lately, he would never have supposed himself to need.

With clean hands and an unsuspecting heart I tumbled into the mud a week ago Sunday, and I don't know when I shall crawl out of it again. Ferns lie at the bottom of the matter. As recently as Memorial Day a fern, to me, was only a fern—a sort of plant without blossoms which grew, probably, in the woods, and was best left to its lovely peace. If we hadn't been cheated by the man who sold us the daffodil bulbs it would never have happened. But the bulbs didn't germinate, if that's what I mean; their allotted space in the dooryard garden stood bleak and forlorn, a reproach to husbandry. "Perhaps," suggested that member of our household who achieves by garden magic more than the rest of us can accomplish badly with hard labor, "perhaps a few ferns."

Ferns grow in woods and swamps, among the black rot of old leaves or upon the hillside shale where the weather's rejected artifacts rebuff the amateur with ten thousand needle points—barbs that have waited since the tertiary midnight to prick your own personal shins, and no other shins. Ferns grow, in short, where man does not; and the road to them is like the road to paradise. But we got ferns—forty of them, in eleven notable varieties. Roots and all, we planted them over the defeated daffodil stumps, to console us with their feathery excellence for the lost golden chalices. And that was that.

But life doesn't chop things up into such neat parcels. You can't whip up an enthusiasm, use it for an afternoon, and then throw it away. In the morning, it walks in upon you, like one of those stray cats which each of us, in some mad moment, has stopped to pet. It yowls from the bedside. It curls up on your feet. It has come to stay. We went to sleep with a job finished; we arose with a complex and fascinating obligation upon us. These woodside aliens, it seemed, were individuals, each with a name, each with its needs and caprices, each with the temperament of a prima donna.

It is extraordinary how much there is to be known about a subject which yesterday was a mystery. Goldsmith thought a folio volume could be written about an egg (time has proved him more than right!) and Johnson replied that even the making of bootjacks breeds experts. I can see now that if I resign all other obligations and remain on my knees in that fern-patch until Atropos snips her scissors across my particular thread, I shall still have something to learn about spores and spore-cases, fronds and pinnules, the way of spleenworts and the different way of brakes.

Now by one of those incredible coincidences, such as the old yarn-spinners employed when they had to snatch their heroines out of the clutches of villainy, I was still scrubbing my hands with pumice to wear off the root stains when the postman rang and handed me in the little book—the amazing little book—listed at the top of this column. Nobody outside our garden wall knew about those ferns; the book was mailed in New York ten hours before we set forth to dig in the woods! Is it any wonder that cabinet secrets leak out and that wars are started for no reason at all?

Well, it is an inimitable book, if you are going in for ferns. Fifty native varieties are named, pictured, diagrammed, discussed. You are told what to plant and

what to avoid, what to dig in the open woods and what to buy.

“Do not,” it says, “plant the hayscented fern, the bracken or the marshfern, for they will eat up the rest of the works.” Or something of the sort.

We had, of course, planted hayscented ferns, many bracken, very many marshfern.

“You will be fortunate if you find a Christmas fern in the vicinity of a large city,” the books say. “Vandals have destroyed them.”

The pride of our new garden, by a small miracle, was a magnificent Christmas fern, for which we had not even hunted!

And so on. The barren garden plot had begun it; the book had sealed the deed. Bring on your experts. I shall gabble to them about pinnate and bipinnate fronds, I shall point them the distinction between *thelypteris clintoniana* and *thelypteris spinulosa*; I shall show them *osmundae* and *botrychia* of the loveliest hues. Grasping them by their buttonholes, I shall remind them that there were ferns on this earth 53 million years ago, that there may be ferns on Mars, that Adam slept among them. I shall dilate upon the connection between ferns and furnaces—for what is coal but the pressed bracken of a thousand ages? I shall, in short, bore them to tears, for the fever is upon me.

Go thou, if you love a garden, and do likewise. But arm yourself first with this little book. It is a mighty Baedeker for a strange and astonishing kingdom—a land of living lace.—BERTRAND K. HART.

Mr. Mousley¹ continues his annual notes on the birds, orchids, ferns, and butterflies of Quebec. Ferns play a

¹ Mousley, H. Notes on the birds, orchids, ferns, and butterflies of the province of Quebec, 1927. *Canadian Field Naturalist* 42: 25–29. 1928.

fairly prominent part in those for 1927. Certain interesting species are recorded from the vicinity of Montreal; *Botrychium minganense*, recently described by Bro. Victorin, was found to have been collected at Hatley several years ago, and a new station for *B. onondagense* discovered there; and at Chambly, after years of searching, Mr. Mousley had his first sight of *B. angustisegmentum* alive and in its native habitat. Other records for some of the rarer species are given.

QUESTIONS.—Apropos of the fact that Mr. H. A. Ward of the Harrisburg Natural History Society has found one lone specimen of Eaton's fern on one of the mountains back of the city, the question arises, how came it there?

A very small woods garden at Mount Gretna is the subject of much study and speculation. Years ago, when it was acquired, there was dense shade of chestnut growth. Later these trees were felled because of blight and other smaller trees were brought in together with many ferns and other woodsy things.

Grass began to appear and violets and flowers hitherto unknown to the gardener, so that each year we would be greeted by new things. One year there appeared a thrifty plant and flower of *Centaurea*. Another year there came the cone flower. This year there is the mountain phlox.

When I ask whence come these visitors, I am told, rather glibly, it seems to me, "O, well, when you bring in plants from the woods, you bring seeds of other plants." This answer does not satisfy.

To return to the Eaton's fern:—are these rare things beginning their existence because of certain conditions of earth, air, sunlight, and moisture, or are they passing